

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing: 15 March 2001 (15.03.01)	
International application No.: PCT/US99/20327	Applicant's or agent's file reference: AA423F/JH
International filing date: 03 September 1999 (03.09.99)	Priority date:
Applicant: YANG, Jian-Zhong et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International preliminary Examining Authority on:

15 December 2000 (15.12.00)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer:  J. Zahra Telephone No.: (41-22) 338.83.38
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# PATENT COOPERATION TREATY

# PCT

REC'D 06 AUG 2001

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

14


Applicant's or agent's file reference AA423F/JH	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/20327	International filing date (day/month/year) 03/09/1999	Priority date (day/month/year) [03/09/1999] <sup>A</sup>
International Patent Classification (IPC) or national classification and IPC A61K7/06		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.
  - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  15/12/2000	Date of completion of this report  02.08.2001
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Giese, H-H  Telephone No. +49 89 2399 8488



# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/20327

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, pages:**

1-51 as originally filed

**Claims, No.:**

1-10 as originally filed

**Drawings, sheets:**

1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/20327

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Yes:	Claims	1-10
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-10
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-10
	No:	Claims	

2. Citations and explanations  
**see separate sheet**

## VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**

## VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

**Reasons for refusal** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Cited documents**

The following documents (D) are referred to in this communication:

D1: DE-A-196 29 951

D2: WO-A-95/20939

**2. Novelty (Article 33(2) PCT)**

The present independent product claim 1 defines a hair care composition comprising (a) a polypropylene glycol having 200-100.000 g/mol, (b) an ester oil of formula (V) having C1-C22 moieties and a HLB of less than 4, (c) a gel matrix having a cationic surfactant, a solid fatty compound and water.

The present independent claims 8 and 10 define preferred embodiments of the invention (see item VIII, point 2).

Document D1 describes a hair care composition in the form of a transparent oil-in-water microemulsion having (a) an oily phase selected from the group of silicone oils and (b) an aqueous phase. Furthermore the composition comprises a polyethoxylated o/w emulsifying agent, a w/o-emulsifying agent, and a cationic surfactant (see p. 2, lines 35-53; p. 3, lines 12-17, lines 54-66; examples; claim 1). The disclosure of D1 lacks in the ester oil, the specific polypropylene glycol and the explicitly defined gel matrix.

Document D2 describes a hair care emulsion comprising 0.1-10% of a monohydric, fatty alcohol, 0.1-10% of a polypropylene glycol having 2.000-14.000 g/mol and 0-20% of a conditioning agent selected from inter alia cationic surfactants (see page 3, line 18 to page 5, line 3; claim 1). The disclosure of D2 lacks in an ester oil and the gel matrix.

In the light of the prior art documents cited in the international search report claims 1 to 10 are novel (Article 33(2) PCT).

**3. Inventive Step (Article 33(3) PCT)**

The problem to be solved in present application was to provide a hair care composition which reduces total hair volume, is easily biodegradable and provides smoother, softer, more silky and more lustrous hair (see page 2, lines 12-16). The solution proposed by the present application is to include polypropylene glycol, an ester oil and a gel matrix (see page 2, lines 19, 20).

This problem has been dealt with in closest prior art document D2: hair care compositions which enhance hair shine and hair alignment and reduction of hair volume (see especially page 3, lines 18-27). The proposed solution encompasses a cream-type emulsion comprising (a) 0.1-10% of a monohydric fatty alcohol and (b) 0.1-10% of a polymer of ethylene oxide, propylene oxide, and mixtures thereof.

The composition of the present application appears to be an alternative solution to the problem which is not taught and which cannot be deduced from the prior art documents in a reasonable way.

Therefore, present claims do involve an inventive step (Article 33(3) PCT).

**Re Item VII      Certain defects in the international application**

As required by Rule 5.1(a)(ii) PCT, it is appropriate to identify documents D1 and D2 and to discuss the relevant background art disclosed therein briefly (see also the Guidelines II, 4.4 PCT).

**Re Item VIII      Certain observations on the international application**

1. Claim 2 does not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not defined. The claim attempts to define the subject-matter in terms of the result to be achieved: "composition reduces bulk hair area by at least about 10%". Such a definition is only allowable under the conditions elaborated in the Guidelines III, 4.7 PCT.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US99/20327

2. The number of claims does not comply with Article 6 and Rule 6.1 (a)(b) PCT (the Guidelines C-III, 3.3 and 5 PCT), since more than one independent claim of the same category should be avoided.

Present independent claims 1, 8 and 10 relate basically to the hair care composition. Claim 8 appears to be broader than claim 1 because of item C. "A suitable carrier" (see also subject-matter of claim 9). Independent claim 11 appear to be a specific embodiment of claim 1.

3. The essential feature "lamellar (gel matrix)" from corresponding pages 13 and 39 has been omitted from subject-matter of claim 11 "gel matrix" (Article 6 PCT).
4. The term "about" detracts clarity from all claims (Article 6 PCT) because it is to be regarded as rendering the scope of the invention vague especially in combination with its presence throughout the description.



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*



# PATENT COOPERATIVE TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>AA423F/JH</b>	<b>FOR FURTHER ACTION</b>		see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. <b>PCT/US 99/ 20327</b>	International filing date (day/month/year) <b>03/09/1999</b>	(Earliest) Priority Date (day/month/year)	
Applicant  <b>THE PROCTER &amp; GAMBLE COMPANY et al.</b>			

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/20327

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K7/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal WPI PAJ REG CA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	✓ WO 95 20939 A (PROCTER & GAMBLE) 10 August 1995 (1995-08-10) ---	
A	✓ EP 0 586 929 A (KAO CORP) 16 March 1994 (1994-03-16) ---	
A	✓ DE 196 29 951 A (BEIERSDORF AG) 29 January 1998 (1998-01-29) ---	
A	✓ EP 0 312 995 A (KAO CORP) 26 April 1989 (1989-04-26) -----	

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

25 May 2000

Date of mailing of the international search report

02/06/2000

Name and mailing address of the ISA

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Stienon, P

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/20327

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9520939	A	10-08-1995	AU 1606995 A	21-08-1995
			EP 0743846 A	27-11-1996
			US 5997851 A	07-12-1999
EP 0586929	A	16-03-1994	DE 4227203 A	07-10-1993
			DE 9211006 U	16-12-1993
			AT 110955 T	15-09-1994
			DE 69300008 D	13-10-1994
			DE 69300008 T	26-01-1995
			JP 7069835 A	14-03-1995
			US 5538720 A	23-07-1996
DE 19629951	A	29-01-1998	DE 19509079 A	19-09-1996
			EP 0820758 A	28-01-1998
			WO 9628131 A	19-09-1996
			WO 9628132 A	19-09-1996
			EP 0814752 A	07-01-1998
			EP 0814753 A	07-01-1998
			JP 11501641 T	09-02-1999
			JP 11501645 T	09-02-1999
EP 0312995	A	26-04-1989	JP 1106812 A	24-04-1989
			JP 1960663 C	10-08-1995
			JP 6096500 B	30-11-1994
			AT 79019 T	15-08-1992
			DE 3873474 A	10-09-1992
			PH 25169 A	27-03-1991